

Storm Data and Unusual Weather Phenomena - September 2009

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
ILLINOIS, South				
EDWARDS COUNTY --- WEST SALEM [38.52, -88.02], 1.5 NNE BLACK [38.49, -88.09]				
	09/20/09 16:30 CST		0	Heavy Rain
	09/20/09 23:59 CST		0	Source: Trained Spotter
Route 130 was flooded and reduced to one lane of traffic for about a mile. A trained spotter three miles west of West Salem measured 5.1 inches, mostly during the evening.				
A prolonged period of thunderstorms occurred over southeast Illinois in a very moist southerly wind flow. A weak low pressure center just northwest of the Ohio River's confluence with the Mississippi River helped to focus the moisture and convergence. A 500 mb shortwave rotating northeast across the Lower Ohio Valley further aided the storms.				
(IL-Z075) JEFFERSON, (IL-Z076) WAYNE, (IL-Z077) EDWARDS, (IL-Z078) WABASH, (IL-Z080) PERRY, (IL-Z081) FRANKLIN, (IL-Z082) HAMILTON, (IL-Z083) WHITE, (IL-Z084) JACKSON, (IL-Z085) WILLIAMSON, (IL-Z086) SALINE, (IL-Z087) GALLATIN, (IL-Z088) UNION, (IL-Z089) JOHNSON, (IL-Z090) POPE, (IL-Z091) HARDIN, (IL-Z092) ALEXANDER, (IL-Z093) PULASKI, (IL-Z094) MASSAC				
	09/25/09 20:00 CST		0	Dense Fog
	09/26/09 09:00 CST		0	
Dense fog formed as a result of calm winds and moist air under a high pressure system. Rain during the previous 24 hours moistened the ground, contributing to high humidity. Visibility was below a quarter mile for most of the night into early the next morning.				
WAYNE COUNTY --- 2.1 SSW MIDDLETON [38.27, -88.68]				
	09/26/09 13:30 CST		0	Thunderstorm Wind (EG 52 kt)
	09/26/09 13:30 CST		0	Source: Trained Spotter
A trained spotter estimated wind gusts from 55 to 60 mph on Interstate 64, along with one-half inch hail.				
FRANKLIN COUNTY --- 2.0 N CHRISTOPHER [38.00, -89.05]				
	09/26/09 14:30 CST		0	Hail (1.00 in)
	09/26/09 14:30 CST		0	Source: Public
Quarter-size hail was reported just north of Christopher.				
FRANKLIN COUNTY --- BUCKNER [37.98, -89.02], EWING [38.08, -88.85]				
	09/26/09 14:45 CST		0	Hail (0.75 in)
	09/26/09 14:48 CST		0	Source: Emergency Manager
Dime-size hail occurred in Buckner, Ewing, and the northeast part of Benton.				
FRANKLIN COUNTY --- BUCKNER [37.98, -89.02], EWING [38.08, -88.85]				
	09/26/09 14:45 CST		3K	Thunderstorm Wind (EG 50 kt)
	09/26/09 14:48 CST		0	Source: Trained Spotter
Large tree limbs were blown down in Ewing, the northeast part of Benton, and Buckner.				
Thunderstorms developed along a cold front as it moved southeast across southern Illinois. The storms were supported by a 500 mb trough axis approaching the Mississippi River, preceded by moderately strong winds around 40 knots. Isolated storms produced wind damage and hail.				
(IL-Z075) JEFFERSON, (IL-Z076) WAYNE, (IL-Z077) EDWARDS, (IL-Z078) WABASH, (IL-Z081) FRANKLIN, (IL-Z082) HAMILTON, (IL-Z083) WHITE				
	09/27/09 03:00 CST		0	Dense Fog
	09/27/09 08:00 CST		0	
Dense fog occurred during the early morning hours. Visibility was one-quarter mile or less along and north of a Benton to Carmi line. A high pressure ridge passing across the Mississippi Valley provided light winds and clear skies favorable for fog.				

INDIANA, Southwest

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
VANDERBURGH COUNTY --- 4.5 SSE EVANSVILLE [37.92, -87.52], 4.5 SSE SMYTHE [37.94, -87.45], 0.7 WSW SMYTHE [38.00, -87.49], 0.0 NE HARWOOD [38.00, -87.58], 1.9 SW EVANSVILLE [37.96, -87.57]				
	09/05/09 15:30 CST		50K	Flash Flood (due to Heavy Rain)
	09/05/09 17:30 CST		0	Source: CoCoRaHS
A CoCoRaHS (Community Collaborative Rain, Hail, and Snow) Network observer measured 1.67 inches of rain in less than an hour on the southeast side of Evansville. Widespread street flooding caused numerous vehicles to stall out. Police and fire crews were kept busy with vehicle rescues. Water was up to waist-deep on one side street south of downtown. The most affected areas of Evansville were from the downtown area to the southeast side. Garages and basements were flooded in the southeast section of the city. Flooding occurred on the Lloyd Expressway, causing westbound traffic to narrow to one lane that was under water but passable. The CoCoRaHS observer recorded 3.64 inches for the 24-hour period ending early on the 6th.				
VANDERBURGH COUNTY --- 4.1 SSE SMYTHE [37.95, -87.45]				
	09/06/09 21:45 CST		0	Heavy Rain
	09/06/09 22:34 CST		0	Source: Trained Spotter
Two inches of rain were measured in 45 minutes on the southeast side of Evansville near Angel Mounds. Yards were covered in several inches of water. A CoCoRaHS (Community Collaborative Rain, Hail, and Snow) Network observer measured 5.19 inches for the 48-hour period ending early on the 7th.				
WARRICK COUNTY --- CHANDLER [38.05, -87.37], 1.4 ESE CHANDLER [38.04, -87.35], 1.6 ESE NEWBURGH [37.94, -87.39], 0.4 ESE NEWBURGH [37.95, -87.41]				
	09/06/09 22:50 CST		0	Flash Flood (due to Heavy Rain)
	09/07/09 00:05 CST		0	Source: Law Enforcement
One inch of rain was measured in 15 minutes at Chandler. A CoCoRaHS (Community Collaborative Rain, Hail, and Snow) Network observer reported a 24-hour total of 2.45 inches several miles west of Chandler. Flooding was reported in both Newburgh and Chandler. The ground was already very moist from between 1 and 2 inches of rain that fell the previous day.				
A warm front moved very slowly north across Tennessee. From the afternoon of the 5th through the night of the 6th, locally heavy rain occurred in thunderstorms that developed along and north of the warm front.				
SPENCER COUNTY --- ROCKPORT [37.88, -87.05], 1.7 NW PATRONVILLE [37.87, -87.14], 2.4 NE MIDWAY [38.03, -87.11], 2.9 WSW SANTA CLAUS MUNI ARP [38.06, -86.97], 1.8 SE DALE [38.15, -86.96], 2.1 ENE SANTA CLAUS [38.14, -86.87]				
	09/20/09 15:40 CST		0	Flash Flood (due to Heavy Rain)
	09/20/09 18:15 CST		0	Source: Public
Flash flooding of roads occurred. There was a report from the general public of a storm total rainfall of 4.75 inches at Rockport. One lane of U.S. Highway 231 was flooded near Chrisney. State Route 245 near Santa Claus was under water and closed. A CoCoRaHS (Community Collaborative Rain, Hail, and Snow) Network observer reported 3.56 inches of rain at Chrisney.				
A prolonged period of thunderstorms occurred over southwest Indiana in a very moist southerly wind flow. A weak low pressure center just northwest of the Ohio River's confluence with the Mississippi River helped to focus the moisture and convergence. A 500 mb shortwave rotating northeast across the Lower Ohio Valley further aided the storms.				
WARRICK COUNTY --- 0.9 NW BOONVILLE [38.06, -87.28], 1.6 SSW BOONVILLE [38.03, -87.28], 1.4 SE BOONVILLE [38.03, -87.26], 0.9 NE BOONVILLE [38.06, -87.26]				
	09/22/09 13:00 CST		30K	Flash Flood (due to Heavy Rain)
	09/22/09 14:30 CST		0	Source: Emergency Manager
Many low-lying areas of Boonville were under water. Some roads were under as much as four feet of water. Numerous roads were flooded, with stranded cars. Some homes were flooded. A CoCoRaHS (Community Collaborative Rain, Hail, and Snow) Network observer reported 1.57 inches of rain about a mile north of the city. The ground was already very moist from between 3 and 4 inches of rain that fell on the 20th.				
Numerous thunderstorms developed ahead of a cold front moving east across Illinois and extreme western Kentucky. A deep, moist southerly wind flow aloft contributed to heavy rainfall.				
(IN-Z081) GIBSON, (IN-Z082) PIKE, (IN-Z085) POSEY, (IN-Z086) VANDERBURGH, (IN-Z087) WARRICK, (IN-Z088) SPENCER				
	09/25/09 22:00 CST		0	Dense Fog
	09/26/09 08:00 CST		0	
Dense fog formed as a result of calm winds and moist air under a high pressure system. Rain during the previous 24 hours moistened the ground, contributing to high humidity. Visibility was below a quarter mile during the late night and early morning hours.				

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MCCRACKEN COUNTY --- 1.1 SE PADUCAH [37.07, -88.62]				
	09/02/09 20:30 CST		15K	Heavy Rain
	09/02/09 21:30 CST		0	Source: Emergency Manager
Street flooding was reported in the usual problem areas on Business Loop U.S. 60 on the south side of Paducah. The water was one to three feet deep and caused at least a few vehicles to stall out. One small car floated around. Police assisted motorists.				
A nearly stationary thunderstorm produced very heavy rainfall. The storm occurred in a low-level east to southeast wind flow underneath a weak upper low.				
CHRISTIAN COUNTY --- 1.0 W GRACEY [36.87, -87.67]				
	09/04/09 17:05 CST		0	Funnel Cloud
	09/04/09 17:05 CST		0	Source: NWS Employee
An off-duty meteorologist spotted a cold air funnel cloud while travelling on Interstate 24 west of Hopkinsville.				
A funnel cloud that was not associated with a thunderstorm occurred during the late afternoon. East surface winds brought cool air associated with high pressure over the Great Lakes region. In the upper levels, a 500 mb closed low over Missouri resulted in colder air aloft and steep lapse rates.				
MCCRACKEN COUNTY --- MAXON [37.08, -88.73], 1.9 SE MAXON [37.06, -88.71]				
	09/05/09 14:00 CST		0	Heavy Rain
	09/05/09 16:00 CST		0	Source: Law Enforcement
Minor flooding occurred in the usual problem areas on Kentucky Highways 998 and 1565 west of Paducah.				
CALLOWAY COUNTY --- 1.0 E MURRAY [36.62, -88.30], 1.5 SSW VAN CLEAVE [36.63, -88.24], 2.7 SSW VAN CLEAVE [36.61, -88.24], 1.8 SE MURRAY [36.60, -88.29]				
	09/06/09 12:00 CST		30K	Flash Flood (due to Heavy Rain)
	09/06/09 13:30 CST		0	Source: Emergency Manager
Two persons were evacuated from a residence off Kentucky 94 east of Murray. That residence and another at that location were deemed uninhabitable due to flooding. Red Cross was aiding the victims. Residences on an adjacent street had flooding that stopped just short of the houses but submerged lawn mowers in the yard. The mesonet system west of Murray measured 1 inch of rain in less than an hour. From observer reports, the rain east and south of Murray was heavier.				
A warm front moved very slowly north across Tennessee. From the afternoon of the 5th through the night of the 6th, locally heavy rain occurred in thunderstorms that developed along and north of the warm front.				
DAVIESS COUNTY --- OWENSBORO [37.77, -87.12], 1.0 NE (OWB)OWENSBORO ARPT [37.76, -87.16], 2.3 SSE OWENSBORO [37.74, -87.11], 1.3 NW DOYLE [37.77, -87.08]				
	09/20/09 17:02 CST		20K	Flash Flood (due to Heavy Rain)
	09/20/09 18:40 CST		0	Source: Law Enforcement
Numerous roads were flooded in the city, including the main arteries through the city. Numerous city streets were closed. Several vehicles were disabled, including an ambulance. Manhole covers were lifted off from flood waters. The daily rainfall total at the Owensboro airport was 5.05 inches, most of which fell in the afternoon and evening.				
A prolonged period of thunderstorms occurred over the Owensboro area in a very moist southerly wind flow. A weak low pressure center just northwest of the Ohio River's confluence with the Mississippi River helped to focus the moisture and convergence. A 500 mb shortwave rotating northeast across the Lower Ohio Valley further aided the storms.				
DAVIESS COUNTY --- OWENSBORO [37.77, -87.12]				
	09/22/09 14:00 CST		0	Heavy Rain
	09/22/09 14:45 CST		0	Source: Public
Street flooding was reported.				
MCLEAN COUNTY --- 1.0 NE ISLAND [37.46, -87.14]				
	09/22/09 16:30 CST		0	Heavy Rain
	09/22/09 17:30 CST		0	Source: Emergency Manager
A secondary road just outside the northeast side of town was flooded.				

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Numerous thunderstorms developed ahead of a cold front moving east across Illinois and extreme western Kentucky. A deep, moist southerly wind flow aloft contributed to heavy rainfall.

UNION COUNTY --- MORGANFIELD [37.68, -87.92], 2.9 NW ARNOLD [37.61, -87.96]

09/23/09 13:50 CST	0	Heavy Rain
09/23/09 14:20 CST	0	Source: Law Enforcement

A few secondary roads were closed throughout the county for a short period of time due to high water.

WEBSTER COUNTY --- 4.0 W DIXON [37.52, -87.77]

09/23/09 14:20 CST	0	Heavy Rain
09/23/09 14:50 CST	0	Source: Law Enforcement

Standing water was observed along Highway 132 West for a short period of time.

Isolated, nearly stationary showers and thunderstorms produced locally heavy rainfall. The activity occurred in the vicinity of a weak inverted surface trough extending northward into the Lower Ohio Valley.

DAVIESS COUNTY --- OWENSBORO [37.77, -87.12]

09/24/09 14:05 CST	0	Heavy Rain
09/24/09 15:20 CST	0	Source: Trained Spotter

Standing water was observed on several roads throughout Owensboro.

A weak low was centered over western Tennessee, with a warm front extending east along the Kentucky border. A large cluster of showers and thunderstorms north of the warm front caused some locally heavy rainfall.

(KY-Z001) FULTON, (KY-Z002) HICKMAN, (KY-Z003) CARLISLE, (KY-Z004) BALLARD, (KY-Z005) MCCracken, (KY-Z007) LIVINGSTON, (KY-Z010) CRITTENDEN, (KY-Z014) UNION, (KY-Z018) HENDERSON

09/26/09 00:00 CST	0	Dense Fog
09/26/09 08:00 CST	0	

Dense fog formed as a result of calm winds and moist air under a high pressure system. Rain during the previous 24 hours moistened the ground, contributing to high humidity. Visibility was below a quarter mile during the late night and early morning hours.

MISSOURI, Southeast

CAPE GIRARDEAU COUNTY --- 1.0 NNW JACKSON [37.39, -89.68], 1.3 NE JACKSON [37.39, -89.66], 1.1 SW CAPE GIRARDEAU [37.29, -89.54], 1.3 NW MARQUETTE [37.28, -89.58], 0.6 SW JACKSON [37.37, -89.68]

09/06/09 17:30 CST	0	Flash Flood (due to Heavy Rain)
09/06/09 19:35 CST	0	Source: Emergency Manager

An emergency management official reported measuring 2.5 inches of rain in Jackson within a couple hours. Urban street flooding occurred, with one to two feet of water in downtown Jackson. In Cape Girardeau, minor street flooding was reported downtown, with noticeably worse flooding on the west side of the city.

Locally heavy rain occurred in thunderstorms that developed along and north of a warm front located near the Kentucky/Tennessee state line.

(MO-Z076) PERRY, (MO-Z086) BOLLINGER, (MO-Z087) CAPE GIRARDEAU, (MO-Z110) STODDARD, (MO-Z111) SCOTT, (MO-Z112) MISSISSIPPI, (MO-Z114) NEW MADRID

09/26/09 00:00 CST	0	Dense Fog
09/26/09 05:00 CST	0	

Dense fog formed as a result of calm winds and moist air under a high pressure system. Rain during the previous 24 hours moistened the ground, contributing to high humidity. Visibility was below a quarter mile during the late night hours.

(MO-Z087) CAPE GIRARDEAU, (MO-Z111) SCOTT

09/27/09 00:00 CST	0	Dense Fog
09/27/09 08:00 CST	0	

Storm Data and Unusual Weather Phenomena - September 2009

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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Dense fog occurred during the late night and early morning hours. Visibility was one-quarter mile or less in the Cape Girardeau area. A high pressure ridge passing across the Mississippi Valley provided light winds and clear skies favorable for fog.